STEFANSSON'S EXPEDITION

The following letter from Mr. Vilhjalmur Stefansson, dated Point Barrow, Alaska, Oct. 31, 1913, has been received by our Society. It contains the first detailed statement of the plans for exploration he had formulated before the drifting away of the *Karluk*. This statement is of much importance, as Mr. Stefansson hopes still to carry out practically his programme of work and that with the collaboration of the *Karluk*. He outlines his modification of and additions to his working plans during the period before the opening of navigation next summer rendered necessary by recent events; and discusses the experience of other vessels caught in the ice as the *Karluk* was in the Point Barrow region, drawing inferences as to the prospects of the *Karluk* under various circumstances. Mr. Stefansson writes:

"Hitherto I have not been able to prepare for publication a statement of the organization, plans and fortunes of our expedition to this time. The leading facts may be of interest, and I here present them.

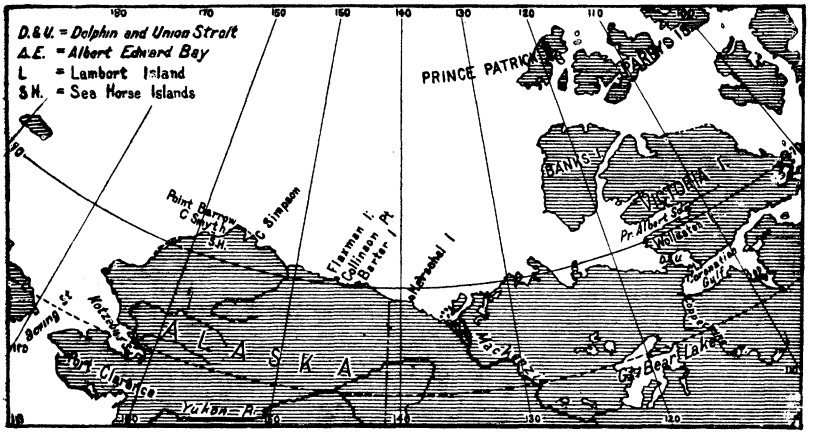
"We had three ships when we left Port Clarence, the *Karluk, Alaska* and *Mary Sachs*. I was in command of the *Karluk* with Captain B. A. Bartlett as sailing master. Dr. Anderson and Captain Otto W. Nahmens were in charge of the *Alaska,* and Kenneth C. Chipman and Captain Peter Beneard were in charge of the *Mary Sachs*. As the *Alaska* was detained at Port Clarence because repairs to her engines were needed, the *Karluk* and *Mary Sachs* left her behind, sailing on July 27. We do not know when the *Alaska* sailed. It was arranged that the three ships should meet at Herschel Island; but if the *Karluk* arrived there first she was to land certain stores she had on board for the other ships and then go north without awaiting their arrival.

"The *Karluk* party was to confine itself chiefly to exploring the sea west of the Parry Islands, and especially those unknown waters to the west and northwest of Prince Patrick Island. We hoped to take the *Karluk* north along the 141st meridian until we should discover land or she was stopped by ice. If we found land a base station was to be erected there; if we were stopped by ice our purpose was to try to follow its edge eastward and to make a base for our first year's work, preferably near the southwest

corner of Prince Patrick Island, charted as Lands End; or if this was not possible, on the west coast of Banks Island.

"The *Alaska,* after reaching Herschel Island, was to steam east and establish a winter camp on the south shore of Dolphin and Union Strait in the neighborhood of Lambert Island.

"The *Mary Sachs* was to steam east from Herschel Island to the head of Prince Albert Sound, the deep indentation on the west coast of Victoria Island, and land supplies for the geographical and geological exploration of Victoria Island in the spring of 1914; then she was to return to Beaufort Sea and give the rest of the season to oceanographical work south and west of Banks Island. Her work was to be almost wholly oceanographical during the



Map of the Arctic coast of Alaska and northwestern Canada showing Stefansson's field of work. Scale, 1:26,000,000.

three years of the expedition, with this proviso that she should be ready to assist in any way either the *Karluk* or the *Alaska.* She is schooner rigged, 33 tons, and has a net speed of about 6 knots an hour with the aid of her gasoline auxiliary engines. She has a captain and three men in the crew. Our oceanographer, Mr. James Murray, was to be the only member of the scientific staff aboard her. She was to carry some Eskimo helpers, and her winter quarters were to be at Herschel Island, or at any convenient point east of it.

"In equipment and number of crew the *Alaska* was to be the same as the *Mary Sachs.* The two vessels have about the same tonnage. The *Alaska* was to have, however, a large scientific staff

composed of Dr. R. M. Anderson, Commander, mammalogist and ornithologist; J. J. O'Neill, geologist; Kenneth G. Chipman, topographer, with J. R. Cox as assistant; Henry Beuchat and D. Jenness, anthropologists; Fritz Johansen, marine zoologist; William L. McKinlay, magnetician, and George H. Wilkins, photographer. Chipman, Cox, O'Neill, Beuchat and Jenness, all experienced men, were detailed by the Geological Survey of Canada. Wilkins is a competent cinematographer and it is expected that his pictures of the uncontaminated Eskimo of Victoria Island will be of great ethnological value; Dr. Anderson was with me for four years on our last expedition; McKinlay, a young graduate of Glasgow University, was thoroughly trained for his work, though without field experience.

"Mr. Chipman was placed in charge of the *Mary Sachs* at Port Clarence because the oceanographical equipment was on the *Karluk*, and Mr. Murray therefore had to go with the *Karluk* so as to be able, while sailing to Herschel Island, to divide this equipment suitably between himself and Dr. Mackay, who was to do the oceanographical work with the northern party. Mr. Murray, at Herschel Island, was to take charge of the *Mary Sachs* and Mr. Chipman was to be transferred to the *Alaska*.

"The southern party were to cover these departments of study: Mammalogy and Ornithology by Dr. Anderson; Marine Zoology, Botany and Oceanography by Johansen; Topography by Chipman and Cox; Geology by O'Neill; Magnetism by McKinlay; although McKinlay was placed in charge also of meteorology, the observations in this department were to be made by anyone at base camp when the others were engaged in field work. The location I selected for a winter base [Dolphin and Union Strait] was chosen because here driftwood from the Mackenzie River is likely to be in ample supply for firewood and house-building. There is much game also in this neighborhood, both caribou and seals. The country to the south as far as Great Bear Lake has never been crossed by white men. My observations on the edges of this section led me to believe that it is intersected by rivers running in deep gorges and largely covered by hills showing many precipices. In this case geological work can best be done here in winter, for the river cliffs, which cannot be reached on account of deep and rapid water in summer, may easily be approached on the winter ice. The topographers and geologists, it was therefore decided, should spend the winter of 1913-14 working up the region between the coast and Great Bear Lake. Then they were to cross Wollaston Peninsula late

in March to the head of Prince Albert Sound, and from the base which the *Mary Sachs* was to establish there, as mentioned above, they were to complete the mapping of the northeast coast of Victoria Island between the farthest points reached in their surveys by M'Clure and Amundsen (Hansen). They were also to explore the large river flowing into Prince Albert Sound from the east, and if possible the river which flows east from the center of the island into Albert Edward Bay.*

"The most favorable location in this district for anthropological work is on Dolphin and Union Strait. The Akuliakattagmiut tribe lives here and is the most westerly, and therefore the most isolated, of the copper Eskimos. Neither they nor their forefathers ever saw white men until the spring of 1910. It was among them and the Kanghirgyuargmiut tribe of Prince Albert Sound that European-like characteristics were found by us to be most pronounced. The latter tribe came in contact both with Collinson and M'Clure, but the evidence shows that this could have had practically no effect upon their manners and customs.

"It was left to Dr. Anderson to choose winter bases for the second and third winters, which would naturally depend upon the achievement of the first year.

"The scientific staff of the *Karluk* was to consist, besides myself, of George Malloch, geologist, detailed from the Canadian Geological Survey; B. M. McConnell, meteorologist and photographer; Dr. A. F. Mackay, surgeon and oceanographer; and Bjarne Mamen, assistant to the geologist and oceanographer.

"It was the purpose to have the *Karluk* give her summers as far as possible to the exploration of the unknown region; sledge journeys were to be made in winter over the sea ice in search for new land and to take soundings and carry out such other oceanographical work as was possible. In the summer season also the geology, zoology, botany and archaeology of any accessible land will be studied. Every effort was to be made at the end of the first year to transfer Mr. McKinlay to the northern party, so as to give more geographical scope to his magnetic work.

"These were our plans when we sailed. They may still be considered our plans, though mishaps have made it impossible at once to carry them out. It may be that the *Karluk* will not be able to continue her part of the work next summer. If this is so the *Mary Sachs* will take her place.

"The details I wrote of the summer happenings have probably

*These two rivers were discovered by Stefansson on his last expedition.

been printed in the newspapers. I shall not here repeat them. This was a bad ice year between Point Barrow and Herschel Island and the autumn frosts came much earlier than usual. The *Karluk* was solidly frozen in on August 17, and even on August 6 the young ice was strong enough to walk on near Point Barrow.

"There are ice ships no doubt which could have forced their way ahead in places where the *Karluk* was delayed. But, as she came up to her specifications and to our expectations of her, her failure to reach Herschel Island must be charged either to bad luck or bad judgment. In Port Clarence I took aboard the *Karluk* five members of the southern party: Murray because he had work to do on the *Karluk,* McKinlay because he was to establish a magnetic station at Herschel Island, Beuchat and Jenness because they wished to spend a few days with the Herschel Island Eskimos and Wilkins to take pictures. We expected to land these five men at Herschel Island, where they were to await the *Alaska,* excepting Murray, who was to transfer to the *Mary Sachs.* The latter vessel was to accompany the *Karluk* all the way to Herschel Island. The two vessels, however, were separated in a gale at Kotzebue Sound and I have not seen her since. I have only just learned at Point Barrow that both the *Alaska* and *Mary Sachs* are safe in winter quarters at Collinson Point. It is to be regretted that five men of the southern party are aboard the *Karluk,* for their work was to be with the other vessels which were carrying the provisions, equipment and clothing intended for them. We tried in August to land Beuchat and Jenness at Flaxman Island though eighteen miles of floating ice intervened, but it was impracticable to take them ashore with the six weeks' provisions they needed to equip them for a journey to Herschel Island should they find that the other vessels had passed to the eastward. If we had known, as we do now, that the schooners were at Collinson Point we might have landed the men without burdening them by heavy gear.

"If during the winter the *Karluk* should drift and come to rest within practicable distance from shore all the members of the southern party will be transferred to land to join the schooners.

"As for ourselves, situated as we are, we shall try to do such scientific work as there is opportunity to do. The two chief features of my winter plans are a sledge journey north from Barter Island and the exploration of the Mackenzie Delta. Both these projects may prove to be of considerable geographical interest.

"The ice journey over the sea north from Barter Island should be made in February and March. If we should attain a point

only 100 miles from shore we might determine the edge of the continental shelf at least; while if we should find ice conditions favorable, 300 miles does not seem too much to hope for. Our route would lie about 100 miles east of the place where Leffingwell and Mikkelsen made their sledge journey north on the sea ice. As far as I know no vessel has ever been over 50 miles from shore in the longitude of Barter Island. Barter Island hugs the coast in about 144° West Long.

"With regard to the exploration of the Mackenzie Delta I may say that the Mackenzie is the largest river in Canada, and is likely to attain some time a commercial importance second only to that of the St. Lawrence River. There is a serious hindrance to navigation in the series of rapids sixteen miles long between Smith Landing and Fort Smith, about midway between Athabaska and Great Slave Lakes. According to the Hudson Bay Company's figures this leaves about 1,500 miles of navigable water from the falls to the ocean, 1,300 miles of which have been repeatedly navigated by the screw propeller steamer *Wrigley,* drawing 6½ feet. The most northerly 200 miles have been navigated only by sail boat drawing less than five feet. This is the delta of the river. It is about 100 miles wide and there are numerous channels and islands.

"It seems likely that careful surveys of the more important of these channels will bring to light a route that will be safe for a steamer drawing the 6½ feet, which it could carry all the way (1,500 miles) south to the Smith Rapids. As the Mackenzie may spring into an importance comparable with that of the Yukon, it seems that the charting of its delta and the sounding of its channels is a work of great practical value. The main part of the survey work can most conveniently be done between March and July, inclusive. In March, April and the first half of May the work would be done by sledge and in June and July by boat, and the survey party would be at Herschel Island the last week in July ready to join the *Alaska* on her way eastward to Coronation Gulf to take up the regular programme of the expedition.

"We do not know, of course, what may happen to the *Karluk* this winter, but the experience of other vessels under similar circumstances may give us some light as to the probabilities.

"The bark *Young Phoenix* was abandoned in the ice off Point Barrow in August, 1888. Before the freeze-up that fall she was seen off Collinson Point, but no one boarded her. She was sighted the following spring in the ice off Sea Horse Islands. Eskimos

boarded her several times and she floated slowly up the coast about 7 miles from the shore. She was boarded by Mr. C. B. Brower and Mr. George B. Leavitt when she came opposite Cape Smythe and at that time she had incurred very little injury, though there was much water in her hold. She was not sighted later.

"The steam auxiliary bark *Navarch* in August, 1898, was abandoned twenty miles offshore from Point Barrow. She was one of the strongest vessels ever in the western Arctic. Late in September she was sighted again some 20 miles off Cape Simpson, when she was boarded by Mr. Thomas Gordon; and in October Mr. C. D. Brower went aboard with twenty-two dog sleds and took from her practically everything of value except her coal. In December she was sighted again, this time coming in from the west with the ice about twelve miles south of Cape Smythe. The ice brought her within two miles of the shore and then carried her parallel with the coast until she stopped three or four miles north of Cape Smythe. She was finally crushed by having her entire bottom forced off.

"In the autumn of 1909 the sailing schooner *Ivy* (140 tons) went aground three miles east of Point Barrow and the young ice formed around her. In December a strong southerly gale carried her off in the ice. In the following July she came into view again, drifting up from the southwest parallel to the coast, and passed Cape Smythe some twelve miles offshore. She was at first mistaken for one of the incoming ships and was not properly identified until it was too late. Other ships had been abandoned in the vicinity of Point Barrow and have never been sighted again. It is probable that many of them were crushed and sunk before winter set in.

"It seems likely, therefore, that the *Karluk* will be comparatively safe from the pressure while she remains a considerable distance offshore, and will be likely to be crushed if she comes in on the coast southwest of Point Barrow, for this stretch is exposed to strong gales from the open sea and consequent pressure. Ice pressure is also felt on the coast east of Point Barrow, but to a less degree.

"The men would be quite sure to get ashore safely if the vessel should be crushed in winter, but whether their equipment could be saved would depend upon her distance from land and the travel conditions over the ice. There would be more danger of loss of life should the *Karluk* be crushed next summer, although the chance of safety would be greatly increased by the fact that

the *Karluk* is equipped with three skin boats any one of which could carry the entire company (six scientists, fourteen crew and five Eskimos). These boats weigh each less than 500 pounds and are far stronger than a whaleboat or other wooden boat of similar size. It will be seen, therefore, that in the event of a retreat over the ice to the shore the party would not meet the terrible difficulties which the *Jeannette* expedition encountered because of the heavy weight and the fragile character of their boats.

"If the *Karluk* is seriously injured in the ice this winter or cannot get out of the ice next summer the *Mary Sachs* will have to take the *Karluk's* place in transporting the northern party to Prince Patrick Island. My present inclination is, if the *Mary Sachs* should reach Herschel Island while the coming of the *Karluk* is still problematical, to have her proceed to Prince Patrick Island, to be followed by the *Karluk,* if she is able to go on. It is possible that, under certain circumstances, I may decide to go by sled either to Banks Island or Prince Patrick Island this winter in advance of the ships. We should be able to complete the coast line survey and to carry out geological and archaeological work after the disappearance of snow in summer. We would not be likely to be in danger or great discomfort even should the vessels not be able to follow us next summer and we were thus compelled to spend the winter there."